Abstract

Method for actuating an electromechanical parking brake device

The invention relates to a method for actuating an electromechanical parking brake device for a brake that can be actuated by means of an electromechanical actuator, in which the actuator is comprised of an electric motor and of a reduction gear connected downstream of the electric motor and being provided for converting a rotational motion into a translatory motion, the electromechanical parking brake being provided in the form of a locking mechanism which can prevent the rotational motion of the actuator in the direction of release and which can be released again by further application.

In order to guarantee that the electromechanical parking brake device works reliably in all operating states without using a tension force sensor, the invention discloses determining and storing, during the actuation of a parking brake device, a mean value of the torque (M_{park}) of the electric motor necessary for generating the application force of the brake corresponding to the parking brake actuation and to simultaneously determine the actuator position (φ) and to actuate the electric motor at later points of time in such a way that it generates this torque (M_{park}) multiplied by a correction factor $k\eta=>1$ so that the exerted tension force is maintained or increased.

(Fig. 5)